

**Amendment to the Abstract:**

Please amend the Abstract as follows:

A catheter (1) which is suitable for use in MR imaging avoids undesirable heating of the tissue surrounding the catheter by the MR excitation field. The catheter includes a catheter sleeve (2), a hollow guide channel or lumen (3) within the catheter sleeve for the introduction of a medical instrument, and two electrical conductors (4) which are enclosed by a cable sheath (5) of a dielectric material. The electrical conductors serve to transmit RF signals within the catheter envelope. In order to reduce tissue heating around the catheter, the conductors and the cable sheath ~~sheeth~~ sheath are configured not to support RF signals as the imaging magnetic resonance frequency by selecting a shortening factor such that the common mode is shifted beyond the magnetic resonance frequency. The dielectric material has a relative permittivity ( $\epsilon_r$ ) smaller than 4, the diameter of the electrical conductors being between 5 and 50  $\mu\text{m}$ , and the distance between the electrical conductors being smaller than 300  $\mu\text{m}$ .